

OIL ANALYSIS REPORT

SAB1 **SAB1 G4 Govenor**

Hydraulic System

ESSO TERESSO ISO 46 (1600 LTR)

Sample Rating Trend



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using IND 3 test kits, this testkit includes Analytical Ferrography which provides a detailed morphological analysis of wear particles present in the fluid.

Component wear rates appear to be normal (unconfirmed).

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

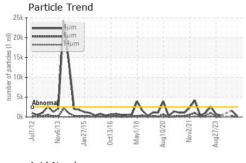
Fluid Condition

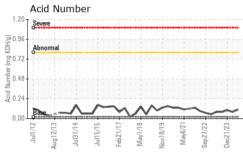
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

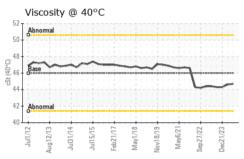
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0933969	WC0812554	WC0642842
Sample Date		Client Info		03 Jul 2024	15 May 2024	15 May 2024
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	ABNORMAL	NORMAL
CONTAMINATION	V	method	limit/base	current	history1	history2
Water		WC Method	>0.05	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	<1		<1
Chromium	ppm	ASTM D5185(m)	>20	0		0
Nickel	ppm	ASTM D5185(m)	>20	<1		0
Titanium	ppm	ASTM D5185(m)		0		0
Silver	ppm	ASTM D5185(m)		0		0
Aluminum	ppm	ASTM D5185(m)	>20	<1		0
Lead	ppm	ASTM D5185(m)	>20	0		0
Copper	ppm	ASTM D5185(m)	>20	<1		<1
Tin	ppm	ASTM D5185(m)	>20	0		0
Antimony	ppm	ASTM D5185(m)		0		0
Vanadium	ppm	ASTM D5185(m)		0		0
Beryllium	ppm	ASTM D5185(m)		0		0
Cadmium	ppm	ASTM D5185(m)		0		0
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185(m)	limit/base	current 0	history1	history2 <1
Boron Barium	ppm ppm					
Boron	• •	ASTM D5185(m)		0		<1
Boron Barium Molybdenum Manganese	ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0	0		<1
Boron Barium Molybdenum	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0	0 0 0		<1 0 0
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0	0 0 0		<1 0 0 0
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185(m)	0 0 0 0 2.4	0 0 0 0		<1 0 0 0 0 0 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185(m)	0 0 0 0 2.4	0 0 0 0 0 0		<1 0 0 0 0 0 <1 1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	0 0 0 0 2.4	0 0 0 0 0 <1 2 1 722		<1 0 0 0 0 0 <1 1 1 707
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	0 0 0 0 2.4	0 0 0 0 0 <1 2		<1 0 0 0 0 0 <1 1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	0 0 0 0 2.4	0 0 0 0 0 <1 2 1 722		<1 0 0 0 0 0 <1 1 1 707
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	0 0 0 0 2.4	0 0 0 0 0 <1 2 1 722 <1	 	<1 0 0 0 0 0 <1 1 1 707
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	0 0 0 0 2.4 0	0 0 0 0 0 <1 2 1 722 <1	 history1	<1 0 0 0 0 0 <1 1 1 707 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m)	0 0 0 0 2.4 0	0 0 0 0 0 0 <1 2 1 722 <1 current	history1	<1 0 0 0 0 0 <1 1 1 707 <1 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	0 0 0 0 2.4 0	0 0 0 0 0 <1 2 1 722 <1 current	history1	<1 0 0 0 0 <1 1 1 707 <1 history2 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) MASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 0 0 2.4 0	0 0 0 0 0 <1 2 1 722 <1 current 0 0 <1	history1	<1 0 0 0 0 <1 1 1 707 <1 history2 0 0 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	0 0 0 0 2.4 0 limit/base >15 >20	0 0 0 0 0 <1 2 1 722 <1 current 0 0 <1	history1	<1 0 0 0 0 <1 1 1 707 <1 history2 0 0 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	0 0 0 0 2.4 0 limit/base >15 >20 limit/base	0 0 0 0 0 <1 2 1 722 <1 current 0 0 <1	history1 history1	<1 0 0 0 0 0 <1 1 1 707 <1 history2 0 <1 history2 1588
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) METHOD ASTM D5185(m)	0 0 0 0 2.4 0 limit/base >15 >20 limit/base >2500 >640 >80	0 0 0 0 0 <1 2 1 722 <1 current 0 0 <1 current 328 97	history1 history1	<1 0 0 0 0 0 <1 1 1 707 <1 history2 0 0 <1 history2 1588 174
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) METHOD ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647	0 0 0 0 2.4 0 limit/base >15 >20 limit/base >2500 >640 >80	0 0 0 0 0 <1 2 1 722 <1 current 0 0 <1 current 328 97 8	history1 history1	<1 0 0 0 0 0 <1 1 1 707 <1 history2 0 0 <1 history2 1588 174 8
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) METHOD ASTM D5185(m) ASTM D5185(m) METHOD ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647	0 0 0 2.4 0 limit/base >15 >20 limit/base >2500 >640 >80 >20 >4	0 0 0 0 0 0 722 1 722 1 current 0 1 current 328 97 8 2	history1 history1	<1 0 0 0 0 0 <1 1 1 707 <1 history2 0 0 <1 history2 1588 174 8 3

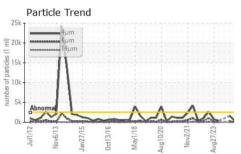


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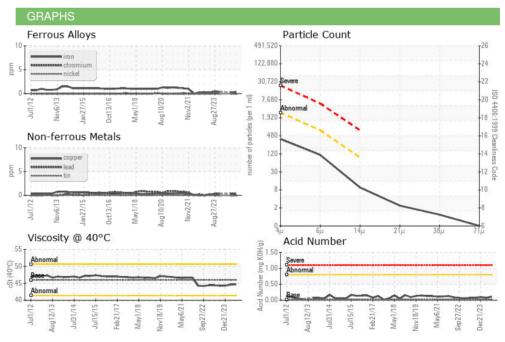








FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.02	0.11		0.08
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE		NONE
Yellow Metal	scalar	Visual*	NONE	NONE		NONE
Precipitate	scalar	Visual*	NONE	NONE		NONE
Silt	scalar	Visual*	NONE	NONE		NONE
Debris	scalar	Visual*	NONE	NONE		NONE
Sand/Dirt	scalar	Visual*	NONE	NONE		NONE
Appearance	scalar	Visual*	NORML	NORML	▲ NOOIL	NORML
Odor	scalar	Visual*	NORML	NORML		NORML
Emulsified Water	scalar	Visual*	>0.05	NEG		NEG
Free Water	scalar	Visual*		NEG		NEG
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	46	44.7		44.6
SAMPLE IMAGES	5	method	limit/base	current	history1	history2
Color					no image	



: 04 Jul 2024

: 05 Jul 2024

: 05 Jul 2024 - Kevin Marson





Laboratory Sample No. Lab Number : 02645452 Unique Number : 5802991

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

Bottom

: WC0933969

Received **Tested**

Diagnosed

Test Package : IND 2 (Additional Tests: TAN Man) To discuss this sample report, contact Customer Service at 1-800-268-2131.

Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

Ontario Power Generation

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